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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/590,767

08/24/2006

Eric Dietschi

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EXAMINER

ALI, MOHAMMAD M

ART UNIT

PAPER NUMBER

3744

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/590,767	<b>Applicant(s)</b> DIETSCHI ET AL.	
	<b>Examiner</b> MOHAMMAD M. ALI	<b>Art Unit</b> 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/24/06</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “dielectric cooler” for claim 15 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9, 12-13, 15-16, 18-20 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishio Tomoyuki hereinafter Nishio (JP 2000-28249 A). Nishio discloses

a self-contained cooling unit (10) for drinking water fountains, wherein the cooling unit comprises: an outer casing (90) forming a fluid tight chamber; a thermal exchange fluid (the fluid/water contained within coil pipe 30) held within the chamber; a source (40) of cold energy transferable to the thermal exchange fluid ; at least one drinking water conduit (30) arranged within the chamber and having a drinking water inlet ( at 91) and a drinking water outlet (72) outside of said chamber.

See Figs 1-6 and the enclosed translation.

Regarding claim 1, the above disclosure of Nishio meets the limitations of claim 1.

Regarding claim 2, Nishio discloses that the fluid tight chamber holding the thermal exchange fluid is divided into two sub-chambers, an inner sub-chamber (50) being contained within an outer sub-chamber (90).

Regarding claim 3, Nishio discloses that the outer sub-chamber (90) substantially surrounds an upper zone of the inner sub-chamber (20).

Regarding claim 4, Nishio discloses that the outer sub-chamber surrounds an upper third (the outer sub chamber 20 encloses the inner sub chamber 50 it implies that 90 also surrounds any portion of 20

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including upper third) of the inner sub-chamber (20).

Regarding claim 5, Nishio discloses that the upper sub-chamber (upper sub chamber of 90) surrounds an upper half of the inner sub-chamber (20).

Regarding claim 6, Nishio discloses that the thermal exchange fluid (water within pipe 30) is provided with at least one flow passage (pipe 30) within the chamber for flow of the thermal exchange fluid within the chamber.

Regarding claim 7, Nishio discloses that the at least one flow passage (30c) allows thermal exchange fluid to flow from the outer sub- chamber (20) to the inner sub-chamber (20) and vice-versa.

Regarding claim 8, Nishio discloses that the at least one drinking water conduit (30e) is located in an outer sub- chamber (90) of the chamber.

Regarding claim 9, Nishio discloses that the at least one drinking water conduit (30a) is located in an inner sub-chamber (20) of the chamber.

Regarding claim 12, Nishio discloses that the source (40) of cold energy transferable to the thermal exchange fluid (contained in pipe 30) is located within the inner sub-chamber (20) of the chamber.

13) (Currently Amended)

Regarding claim 13, Nishio discloses that the source (40) of cold energy transferable to the thermal exchange fluid is located within an exterior cavity formed by a wall of the inner sub- chamber (20).

Regarding claim 15, Nishio discloses that refrigerating gas is being used in the

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refrigerating cycle and generates cooling effect in the source (40) of cold energy transferable to the thermal exchange fluid is a dielectric (refrigerant Freon is a dielectric, for evidentiary reference see abstract of SU 1195397 A to Buanov et al.) cooler.

Regarding claim 16, Nishio discloses that the source (40) of cold energy transferable to the thermal exchange fluid is an evaporator coil placed within an inner sub-chamber of the chamber.

Regarding claim 18, Nishio discloses a temperature sensor (S1/S2) located within the chamber.

Regarding claim 19, Nishio discloses that the thermal exchange fluid is water (See abstract).

Regarding claim 20, Nishio discloses that the at least one drinking water conduit (30) is arranged within the chamber in a coil.

**22) (Currently Amended)**

Regarding claim 22, Nishio discloses that the at least one drinking water conduit is arranged in a coil in the upper, outer sub-chamber around the upper half of the inner, lower sub-chamber. The extended coil part (30e) from drink coil (30) extends and a part of which is disposed between inner chamber (20) and outer chamber (90) . This position can be considered as the required coil position of claim 22.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio. Nishio discloses the invention substantially as claimed as stated above except location of the source of cold energy on an external wall of the chamber or external wall of the inner sub-chamber. It is mentioned here that locating of a part like source of cold energy either on the wall of an inner sub chamber or on the wall of an outer sub chamber is nothing but a rearranging parts.

Since it has been held that rearranging parts of an invention involves only routine skill in the art. (See *In re Japikse*, 86 USPQ 70). In view of the above the claims 10-11 and 17 are obvious over Nishio.

Regarding claim 17, in view of the rearranging parts, Nishio discloses that an insulation (See Fig. 1, the item disposed between 20 and 90 is insulation) material is provided on one side of the chamber between the source (40) of cold energy located on an external wall (20), and the external wall of the chamber (90).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 10-11, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio in view of Sheckler (US 3,008,299). Nishio discloses the invention substantially as claimed as stated above except a Peltier plate (cooler).

Sheckler teaches the use of a Peltier plate cooler (14) disposed on the side surface of an inner chamber (12) falling between the inner chamber wall (12) and an outer chamber wall (See Fig 1) in a water cooling system to serve as a source of cold energy. See Fig. 1, column 2, line 52 to column 4, line 61. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cooling unit of Nishio in view of Sheckler such that a Peltier cooling plate could be provided in order to cool the drink (water).

Regarding claim 10, it is mentioned here that the general concept of locating a source of cold energy on an external wall of a chamber falls within the realm of a common knowledge as obvious mechanical expedient and this is illustrated by Sheckler which teach the use of a source of cold energy (Peltier cooler 14) located on the external wall of the inner chamber (12) of a water cooling system. Therefore, it would have been one having an ordinary skill in the art at the time the invention was made to modify the cooling unit of Nishio by locating the source of cold energy on the exter wall of the chamber in order to cool the desired liquid/water.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio in view of Pflock (US 2,356,530). Nishio discloses the invention substantially as claimed as stated above except a regular undulated cross section with the water conduit.



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Pflock teaches the use of water cooling pipe (2) with regular undulated cross section (See the pipe 2 in Fig 1) in a liquid or gas cooling apparatus for the purpose of increasing cooling efficiency of gas or liquid including water. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cooling unit of Nishio in view of Pflock such that a cooling pipe with regular undulated cross section could be provided in order to increase the cooling efficiency.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD M. ALI whose telephone number is (571)272-4806. The examiner can normally be reached on maxiflex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J. Tyler can be reached on 571-272-4808. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Mohammad M Ali/  
Primary Examiner, Art Unit 3744